

METHOD AND SYSTEM FOR DETECTING A DEAD SERVER

Abstract of the Disclosure

5 Method and system for detecting a dead server in a multi-server environment. A
virtual ring structure is used in which each server in a server pool is only required
to monitor the status of two other servers in the server pool. Thus, a server need
only transmit ping signals to two other servers (its buddies) in the server pool at
any given time. Because each server maintains the status of only two other
10 servers at any given time, the size of the server pool is not limited by the ability
of each server to send and process ping signals. The two servers which are
monitored by any given server in the server pool are referred to as the "buddy A"
server and the "buddy B" server. When the monitoring server determines that one
of its buddy servers is down, the monitoring server reports the status of the down
15 server to a SQL server that maintains a server table. The server table maintains a
list of each "live" server and the buddy servers assigned to that server. Down
servers are removed from the server table. When a server determines that one of
its buddies is down, the report to the SQL server results in a buddy reassignment.
The buddies of the down server are made buddies of one another and the virtual
20 server ring is once more intact. The SQL server then knows not to route any
client to the down server.

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